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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/907,021	07/17/2001	George L. Markley	DKT 00040	6078

7590 06/15/2005

Borg Warner Inc.
 Powertrain Technical Center, Patent Department
 3800 Automation Avenue,
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EXAMINER

CHARLES, MARCUS

ART UNIT	PAPER NUMBER
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3682

DATE MAILED: 06/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/907,021

Applicant(s)

MARKLEY ET AL.

Examiner

Marcus Charles

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 March 2005.
 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4,6,8 and 11-13 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) ☒ Claim(s) 1,4,11 and 12 is/are allowed.
 6) ☒ Claim(s) 6, 8 and 13 is/are rejected.
 7) ☐ Claim(s) _____ is/are objected to.
 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date _____.
 4) ☐ Interview Summary (PTO-413)
 Paper No(s)/Mail Date _____.
 5) ☐ Notice of Informal Patent Application (PTO-152)
 6) ☐ Other: _____.

DETAILED ACTION

This action is responsive to the amendment filed 3-14-2004, which has been entered.

Claims 1, 4, 6, 8 and 11-13 are currently pending.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. The text of those sections of Title 35, U.S. Code not included in this action can be found

Claim 13 is rejected under 35 U.S.C. 102(b) as being anticipated by Luce.

Luce discloses in figures 1-3 a silent chain comprising a plurality of first link rows comprising one guide link 8 and a number of regular link plates 9,11, a plurality of second link rows comprising one guide link 13 and a same number of regular link plates 10, 12 as the number of regular link plates of the plurality of first link rows; a plurality of connection pins 14, each pin extending through and rotatably joining regular link plates and guide plates of each of two successive interleaving link rows; wherein the guide plates of the plurality of first link rows and the guide plates of the plurality of second link rows are of the same shape and size; wherein the regular link plates of the plurality of first link rows and the regular link plates of the plurality of second link rows are the same

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shape and size', and wherein guide plates of successive interleaving link rows are in staggered relationship along the longitudinal direction of the chain.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 6 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Luce in view of Belcher et al. Luce discloses in figures 1 and 2, a sprocket and power transmission chain comprising a sprocket engaging a transmission chain, the sprocket having a plurality of series of teeth 3,4 wherein teeth of axially adjacent series are circumferentially offset from each other and a transmission chain having a first series of links having drive links and guide links and a second series of links having drive links and guide links wherein the first series and the second series are interleaved along a chain direction so that links of the second series are positioned between and extending adjacent to links of the first series. Luce further discloses the links of the first series and the links of the second series pivotally connected to one another via pins extending through apertures in each link but does not disclose the drive links defining teeth on a first side of the drive links and drive flanks on a second side opposite of the first side of the drive links. However, Belcher et al. teaches in figures 1-4, a transmission chain comprising drive links wherein each drive link defines teeth 5 on a first side of the drive link and includes two drive flanks (not numbered) on a second side opposite the first

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side of drive link. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the apparatus of Luce in view of the teachings of Belcher et al. to include teeth on a first side of the drive links to more securely engage the transmission chain to the sprocket and to include drive flanks on the drive links on a side opposite a side defining teeth so as to enable the transmission chain to drive sprockets with both a first toothed side of the chain and a second drive flanked side of the chain.

NB; it is apparent that the combination of Luce and Belcher would include, when the chain engages the sprocket, positioning the drive link of the first series between adjacent teeth and the engaging teeth of the first series of sprocket teeth and further engages the adjacent teeth of the sprocket at the backside flanks, and the second series of drive links between adjacent teeth of the second series of the sprocket teeth and engaging surfaces of adjacent teeth at the backside flanks at the opposite ends of the drive links. In fig. 3 of Luce, it can be clearly seen that the teeth of the sprocket engaging the surfaces of the backside flanks of the chain.

Allowable Subject Matter

5. Claims 1, 4 and 11-12 are allowed.

Response to Arguments

6. Applicant's arguments filed 3-14-2005 have been fully considered but they are not persuasive. Applicant contended that in the preamble of claim 13, a silent chain is recited and the prior art fails to disclose any chain having teeth. In response, it should be noted that although claim 13 recited a silent chain, it does not mean that a silent

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chain inherently includes teeth. In addition, claim 13 does not teach or suggest that the links of the silent chain includes driving toothed section. The claim has neither recited nor suggested that the links having driving teeth. Therefore, the rejection of claim 13 is proper.

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marcus Charles whose telephone number is (757) 272-7101. The examiner can normally be reached on Monday-Thursday 7:30 am to 6:00 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bucci can be reached on (571) 272-7099. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Marcus Charles
Primary Examiner
Art Unit 3682
June 9, 2005